

CLAIMS

1. A manual tool comprising a pair of jaws, each said jaw having an object engaging portion and an actuating portion;
5 fulcrum means disposed in spaced apart relation from said object engaging portion and said actuating portion for retaining said jaws in pivoting relationship for movement between a first position and a second position; and
spring means for biasing said jaws to said first position;
10 wherein said spring means comprises an arched leaf spring associated with each said jaw, each said leaf spring having a proximal end and a distal end;
means anchoring the proximal end of each said leaf spring to an associated jaw with said springs in symmetrical, contiguous back to back relationship;
whereby the application of a manual force to said actuating portion of said jaws to move said
15 jaws to their second position will serve to deflect said leaf springs and cause a rolling contact therebetween.
2. A tool as defined in claim 1 wherein said anchoring means comprises a hinge means, and
wherein said distal ends bear upon said jaws.
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3. A tool as defined in claim 2 wherein said leaf springs and said jaws are molded from a thermoplastic material.
4. A tool as defined in claim 2 wherein said leaf springs and associated jaws are unitarily
25 molded from a thermoplastic material.
5. A tool as defined in claim 4 wherein said hinge means comprises a living hinge.
6. A tool as defined in claim 4 wherein said fulcrum means is unitarily formed with said
30 jaws.
7. A tool as defined in claim 6 wherein said fulcrum means comprises a plurality of tabs depending from each said jaw, and wherein said tabs are provided with cooperating, snap together gudgeons and gudgeon openings.

8. A tool as defined in claim 7 wherein said jaws are substantially identical.
9. A tool as defined in claim 7 wherein said object-engaging portion is a clamping element
5 biased closed when said jaws are in their first position.
10. A tool as defined in claim 9 wherein said fulcrum means is disposed between said clamping element and said actuating portion.
- 10 11. A thermoplastic spring clip comprising a pair of jaws having opposed ends, each having a functional portion adjacent one end thereof and an actuating portion adjacent the opposed end, and a fulcrum therebetween;
spring means biasing said jaws to a position in which said functional portion of one said jaw is in a first desired relationship relative to that of the other jaw;
15 wherein said spring means comprises an arched leaf spring anchored to each said jaw in symmetrical, back to back, contiguous relationship;
application of a manual pressure on said actuating portions to move said functional portions to a second relationship serving to compress said leaf springs resulting in a rolling contact therebetween.
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12. A spring clip as defined in claim 11 wherein each said leaf spring is anchored to an associated jaw by a hinge.
13. A spring clip as defined in claim 11 wherein each said jaw is unitarily formed with its
25 associated leaf spring.
12. A spring clip as defined in claim 11 wherein each said leaf spring is anchored to an associated jaw by a hinge.
- 30 13. A spring clip as defined in claim 11 wherein each said jaw is unitarily formed with its associated leaf spring.
14. A spring clip as defined in claim 12 wherein said hinge is a living hinge.
said hinge is a living hinge.

15. A spring clip as defined in claim 12 wherein each said jaw is provided with a guide track for its associated leaf spring.

5 16. A spring clip as defined in claim 11 wherein said fulcrum comprises a plurality of tabs depending from each said jaw, and wherein said tabs are provided with cooperating, snap together gudgeons and gudgeon openings.

10 17. A spring clip as defined in claim 16 wherein ones of said tabs serve at least in part to define a central aperture in said jaws, said aperture optionally permitting the entry of a post therein following the snap-engagement of said gudgeons in said gudgeon openings.

15 18. A thermoplastic spring clip comprising a pair of jaws having opposed ends, each having a gripping portion adjacent one end thereof and an actuating portion adjacent the opposed end, and a fulcrum therebetween;
spring means biasing said jaws to a position in which said gripping portion of one said jaw is proximate that of the other jaw;
wherein said spring means comprises an arched leaf spring anchored to each said jaw in symmetrical, back to back, contiguous relationship;
20 application of a manual pressure on said actuating portions serving to compress said leaf springs resulting in a rolling contact therebetween.

19. A spring clip as defined in claim 18 wherein each said leaf spring is anchored to an associated jaw by a hinge.

25 20. A spring clip as defined in claim 19 wherein each said jaw is unitarily formed with its associated leaf spring.